Variable Message Signs

# Building Blocks For Any Sign Application

### **Fully Modular**



Two-Line Truck Mount

Wide Variety of Applications



Arrow Dynamic Sign(ADS)

### Versatility and Flexibility



Ramp Queue Sign

#### Glare-Free Visibility



Permanent Road-Side Sign

### Simplicity of Design



Speed Limit Sign

### Strength and Durability



Truck-Mounted Attenuator

### The BRICK® Modular Message Sign System

# Build your message with the one-of-a-kind BRICK®.

For ramp metering, overhead bridges, permanent roadside locations, cantilever signal arms and every kind of vehicle mount, there's nothing more valuable than The BRICK by ADDCO. Its remarkable modular technology and versatility make it the most revolutionary sign product on the market today. The fully modular design of the BRICK accommodates virtually any size of sign across the widest variety of applications. BRICKs can be arranged vertically or horizontally to create any length and width of sign desired in just minutes.

The BRICK features a full-pixel matrix that provides glarereduced visibility in all lighting conditions. Environmentally sealed to withstand extreme heat, moisture, vibration and shock, BRICKs are vandal-proof and conveniently programmable.

Let us help you design the perfect sign application. Or create your own with our exclusive, easy-to-use sign configuration software, BRICKBuilder™.



240 Arlington Avenue East, St. Paul, MN 55117 Phone (651) 488-8600 Fax (651) 558-3600 e-mail: sales@addcoinc.com, website: www.addcoinc.com

### Required BRICK® Characteristics

Face Material: UV-Inhibited polycarbonate with UV

silk-screened mask

Body Material: ABS thermoplastic Length: 19.25 inches Width: 13.75 inches Height: 2 inches Weight: 4.25 lbs.

The BRICK display module is available in two densities to meet the needs of different applications:

- High density. High-density display modules have 96 pixels consisting of 384 LEDs
- ◆ Standard density. Standard-density display modules have 35 pixels consisting of 140 LEDs

Characteristic	High Density	Standard Density
Dival arrangement	9,10	Ev7
Pixel arrangement	8x12	5x7
Number of pixels	96	35
LEDs per pixel	4	4
Number of LEDs	384	140
LED spacing in pixel	0.5 inches	1.375 inches
Pixel spacing	1.625 inches	2.750 inches
LED type	592 NM amber	592 NM amber
Minimum character	10.5 (5x7)	18 inches
size	7.0 inches (5x3)	
Average 24-hour		
current draw per BRICK	11.5 Amps.	2.5 Amps.
Absolute maximum	·	i i
current draw per BRICK	4.8 Amps.	1.75 Amps.
Typical maximum	,	
current draw per BRICK	3.1 Amps.	0.7 Amps.
Nominal voltage	12 Vdc	12 Vdc.
Minimum voltage	10.5 Vdc.	10.5 Vdc.
•	16.0 Vdc.	16.0 Vdc.
Maximum voltage	I D.U VUC.	10.0 vac.



# Bus Bar for Power and Communications

Material: Aluminum with copper conductors

Length: 240 inches maximum: cut for shorter

lengths
Width: 5 inches
Depth: 0.6 inches

Weight: 1.6 lbs. per running foot

Each changeable message sign using the BRICK modular message sign system can consist of one to 60 BRICKs. BRICKs contain rugged LEDs mounted inside an environmentally sealed case. These attach to a modular bus bar that provides power and signal connections. The entire configuration connects electronically to a master controller on the sign. Text and graphics messages are easily created with Windows-based software. Messages can be controlled onsite or remotely. Input devices include PCs, handheld controllers, cellular phones, and radar devices.

# The BRICK® Modular Message Sign System

Contact your ADDCO sales representative today.

Protected by Patent number 5,914,698. Other U.S. and International patents pending.

ADDCO, Inc., 240 Arlington Avenue E., St. Paul, Minnesota 55117

Phone (651) 488-8600, Fax (651) 558-3600 www.addcoinc.com



## **SKYLINE PRODUCTS, INC.**

### Traffic Systems

# Dynamic Message Signs



- Traffic Systems
- **Dynamic Message Signs**
- Changeable Message Signs
  - **LED Technology**

Skyline Products, Inc. 2903 Delta Drive orado Springs, CO 80910-1012 Voice: 719.392.9046 800.759.9046 800.759.9046 Fax: 719.392.7107 Traffic Systems@Skyline Products.com

### LED DISPLAYS

- High intensity amber AllnGaP LED technology provides excellent 24 hour readability
- · Superior and extremely efficient ventilations system
- · Walk in housing provides safe and easy access
- · Lift face housing available
- · Low power consumption
- 170 controller is standard
- Full matrix configuration available
- · Lift out modules for fast replacement
- Weather tight aluminum construction
- Message selection by predetermined message library and online formatting
- · Diagnostic verification of pixel status
- · Onscreen message confirmation at central
- · All aluminum construction with Kynar coated front face
- · Custom sizes and applications are available

Skyline designs and manufactures the highest quality, most technically advanced, user-friendly, reliable and maintenance free LED DMS systems in the industry. In addition, Skyline provides the longest warranty and best on-going customer support. Skyline does all of this at a competitive price.

Skyline is an ISO 9001 certified company, committed to providing the highest quality DMS system available. Skyline is continuously improving its design and manufacturing procedures to ensure that Skyline remains the industry leader.



VMS Technologies and innovations for 37 years. . . We know what we're doing!

### PRODUCT GROUPS

francit

Highway Signs

R-Tec

Commercial

#### PRODUCT COMPONENTS

Reflective Disk

LED

Fiber Optic

LED and Fiber Optic Hybrids Liquid Crystal Display Curtain Signs



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#### HIGHWAY SIGNS

Vultron has been providing products to the highway market since 1985. Vultron's walk in cabinet design for overhead VMS signs is superior in the industry, as it allows for internal access to all sign components for ease of maintenance. This design virtually eliminates hazardous working conditions for the maintenance worker servicing the sign, traffic hazards of servicing the sign from the outside, and the need for lane closures.



Through ADDCO Corporation, an exclusive distributor based in Minneapolis, MN, over 2,000 portable trailer signs are in use by transportation departments nationwide. Overhead sign installations are also in place nationwide, as well as in the United Kingdom. The technologies used in these signs include reflective disk, multi and mono color LED, fiber optic and LED-Dot.

For more information on highway signs, contact the Vultron sales department at (248) 853-2200 or email us now.

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## **Dynamic Message Systems**

### Scotchlite<sup>™</sup> LED-1 Pixel

#### 3M™Scotchlite™ LED-1 Pixel

Pixels with fluorescent reflective\* material and high output InGaAlP light emitting diodes (LEDs). The LEDs are embedded in the fluorescent reflective panel for performance 24 hours a day. The reflective panel opens during operation and closes when the pixel is not in use.

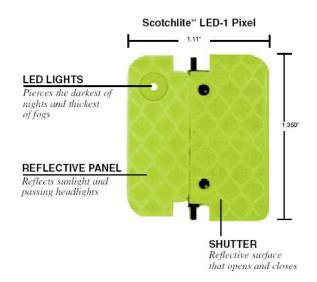
Scotchlite™ LED-1 pixels contain a single high output InGaAIP LED providing characters, graphics and safety symbols on dynamic message systems in accordance with MUTCD design and principles.

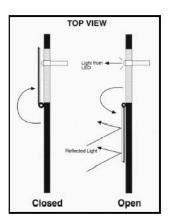
#### Features:

- Message signs can be custom configured to meet any specification
- Retroreflective uses UV stable 3M<sup>™</sup> Scotchlite<sup>™</sup> Diamond Grade<sup>TM</sup> Fluorescent Reflective Sheeting
- · Ascribes to MUTCD color principles
- InGaAlP LED illumination
- Full matrix capability can display various sized characters, graphics, arrows, and safety symbols

### **Display Specifications:**

- Pixel color: Fluorescent orange or fluorescent yellow green
- Pixel size: 1.11 inches x 1.350 inches
- · Modular design
- Module: 16 pixels wide by 8 pixels high
- · Extruded aluminum cabinet
- Non-glare polycarbonate face with UV inhibitor





\*Retroeffection occurs when surfaces return a portion of the directed light to its source. This is why retroreffective materials appear brightest to observers located near the light source - a driver and the vehicle headlights, for example. This is true for drivers at almost any viewing angle, which makes retroeffective surfaces excellent for night wishfilm.

(continued on back)

- Enclosure: Secured National Electrical Manufacturers Association (NEMA) 3R equivalent
- Automatic "fail safe" default message capabilityprotects agency in the event of a continuous power failure
- Modes of display operations reflective/LED and reflective only (LEDs are switched and shuttered vs. on 24 hours)
- · Pixel color guaranteed not to fade for 10 years
- · Efficient power consumption
- Standard interchangeable parts, no special tools required
- Photo cell brightness control
- Multiple levels of illumination
- · Pulse width modulation illumination control
- · ETL approved

#### Software Control:

- Windows™ 2000/NT/98/95
- Programmable default message protects the agency in the event of a power failure
- 32 pre-programmed messages
- 125 user messages
- · NTCIP compliant

### Other Options:

- · Local control cabinet
- Notebook PC
- · Increased display size allows any type of message
- · Remote diagnostics
- · Radar speed display
- Cellular
- · Radio frequency
- · Fiber optics
- Phone line
- CDPD (Cellular Digital Packet Data)
- · Contrast shield
- Custom graphical user interface with site map on software



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